IN THE SPECIFICATION:

Please amend the specification as follows.

[0017] The second visibility test removes most of the hidden primitives. As the rasterization of the primitives is demanding step, a significant time saving can be gained. After second visibility test all the visible primitives are rasterized, step 15. After rasterization the view will be transferred to the frame buffer 16 for expecting to be drawn to the monitor or other viewing device.

[0021] The computed occlusion data is buffered in occlusion buffer 24. The simplest implementation of the occlusion buffer is non-compressed memory stream. If the memory stream capacity is sufficient, geometry of an entire frame can reside in the occlusion buffer while the occlusion information is being constructed. The subsequent 2nd visibility test 25 uses the updated occlusion information. A more advanced implementation of occlusion buffer uses lossless compression. Compression is beneficial because it reduces the memory and memory bandwidth requirements. In case of compression the occlusion unit 24 comprises a compressor 29, memory management unit 210, ring buffer 211 and decompressor 24. Second visibility test 25 is similar to first visibility test 22 including block generator 213 and visibility tester 214 but it has all the occlusion information of the primitives that where visible after first visibility test. This reduces significantly the amount of the information to be rasterized by pixel processing unit 26. Pixel processing unit 25 comprises means for rasterization 215 and a frame buffer 216. An optional high resolution Z-buffer 217 may be included. The frame buffer 216 is applied so that the whole screen may be computed before showing on the screen. The block, cache and memory sizes of the example embodiment presented in FIG. 2 and 3 are just examples and may be selected depending on the hardware and software requirements.